of that amount is perhaps best illustrated by recognizing that even with today's early-generation compression technologies, an ITFS licensee who leases four analog ITFS channels that will then be digitized by the wireless cable operator will have the ability to transmit more than four simultaneous digitized programs, plus receive whatever additional lease fees, equipment, operational support and other consideration the ITFS licensee negotiates. By anyone's definition, that is a "win-win" result²²⁶.

Moreover, the NIA/WCA Joint Proposal includes a provision designed to assure the immediate availability of additional capacity for ITFS usage by providing that no ITFS licensee leasing capacity for digital usage will be permitted to lease 5% of the capacity of its channels.²²⁷/.

at 3:00 am is hardly unlikely. As the concept of "netcourses" discussed previously expands, students will be able to actual participate in "class" at any hour of the day (or night). Or, in order to conserve bandwiths, schools may utilize their ITFS capacity at off-peak hours to download educational material from a central location utilizing the Internet to multiple schools, where such material will be stored on a local file server and accessed by students the next day via an intranet within each school. Certainly, such usage is educational in nature and should not be deterred simply because the information is stored for later use. Indeed, for this reason the Commission should, in conjunction with this proceeding, grant the presently pending petitions for reconsideration of a 1994 decision that only programming transmitted for "real time" viewing by students counts towards minimum programming requirements. See Petition of Alliance for Higher Education, et al, MM Docket No. 93-106 (filed Aug. 5, 1994); WCA Channel Loading Reconsideration Petition, at 6-11. Whatever merit that decision may have had before, it is clearly becoming obsolete with the introduction of advanced digital services.

²²⁶ By way of comparison, under Section 25 of the Cable Television Consumer Protection and Competition Act of 1992, a DBS system only must reserve four to seven percent of its channel capacity exclusively for noncommercial, educational, or informational programming. *See* 47 U.S.C. § 335.

While the ITFS licensee may not lease this 5% of capacity, there should be no restriction on its ability to permit the wireless cable operator access to unused portions, provided that such access can be terminated immediately upon notice from the ITFS licensee.

While, an ITFS licensee can always choose to retain for its exclusive use whatever additional capacity it deems appropriate, this provision assures that at least a significant amount of ITFS channel capacity will be available to every ITFS licensee immediately for whatever needs may arise.

Furthermore, the NIA/WCA Joint Proposal calls upon the Commission to require that each ITFS licensee that leases excess capacity for digital services must maintain the ability to recapture at least an additional 20% of its capacity for the transmission of ITFS programming. Again, while an ITFS licensee will always be free to craft its agreement so that it can recapture whatever additional capacity the parties agree upon, this provision assures each and every ITFS licensee the ability to regain far more effective capacity than the current rules provide.

Recognizing that the recapture of this quantity of capacity could have a significant adverse impact on the wireless cable system, the NIA/WCA Joint Proposal properly permits the ITFS licensee and its lessee to agree to economic adjustments upon recapturing this portion of the ITFS capacity. In so doing, NIA and WCA have deftly balanced the needs of the wireless cable industry with the desire of educators to have access to a substantial portion of the ITFS capacity created as a result of the introduction of digital technologies. By permitting the parties to agree to adjustments in consideration should the ITFS licensee seek to recapture, the NIA/WCA Joint Proposal avoids the

^{228/} A critical component of the NIA/WCA Joint Proposal is the provision that such recapture can be limited to no more than 5% per year, and that the ITFS licensee may agree to defer recapture for up to five years. The Petitioners believe that an ITFS licensee should be free to agree to these limitations on recapture where appropriate to provide the wireless cable operator "breathing room" as it enters the competitive marketplace. These provisions are clearly appropriate in light of the capacity than ITFS licensees will have prior to any recapture, the quantity of the airtime available for recapture, and the costs that wireless cable operators will incur to implement advanced digital technologies. Of course, any ITFS licensee that believes it will need to recapture airtime sooner will remain free to negotiate for that right.

single greatest drawback of the present recapture requirements — wireless cable operators will not compensate ITFS licensees for capacity they may not receive. In determining the financial viability of any leasing arrangement, the wireless cable operator will necessarily consider the value it derives from adding the ITFS licensee's channels to its system. To determine the compensation that it will pay for leased excess capacity, the wireless cable operator today must assume that the ITFS licensee will exercise all recapture rights, since the parties are barred by Commission rule from imposing any economic or operational detriment upon recapture. Thus, ITFS licensees have been inadvertently penalized by the current rule — they are deprived of the ability to be compensated for capacity that is actually used by the operator (although subject to recapture).

That penalty will increase substantially unless the proposal advanced by the NIA/WCA Joint Proposal is adopted. Because the proposal contemplates that far more effective capacity will be available to the ITFS licensee through recapture, the capacity subject to recapture is likely to have increased value, everything else being equal. Retention of the existing policy against financial adjustments in the event of recapture would force the ITFS licensee to forego even greater value than it does today. Under the compromise approach agreed to by NIA and WCA, an ITFS licensee could be compensated for the capacity it actually makes available, while agreeing to forego a portion of that compensation that is not disproportionate in the event it chooses to recapture capacity. Such an approach is eminently fair to all.

The Petitioners recognize that there is no "perfect" answer to the question of how the Commission's ITFS programming rules should be modified to reflect the use of digital technology.

In the past, NIA had called for an absolute reservation of one in every four 6 MHz channels for exclusive ITFS use, while BellSouth Wireless Cable, Inc. has argued that:

The NIA/WCA Joint Proposal steers a course between these extremes, providing the Commission with a compromise solution that serves the public interest well.

b. The Commission Should Not Increase The Minimum Amount Of ITFS Material An ITFS Licensee Must Transmit.

Given the Petitioners prior urging that the Commission should not increase the minimum amount of ITFS programming an ITFS licensee must transmit if it takes advantage of advanced digital technologies, ²³⁰/₂ the Petitioners are pleased that this concept is an essential component of the NIA/WCA Joint Proposal.

^{229/} See Petition of National ITFS Association for Clarification, DA 95-1854, at 4 (filed Nov. 6, 1996); Opposition of BellSouth Wireless Cable to Second Petition for Clarification, DA 95-1854 at 7 n. 15 (filed May 30, 1997).

^{230/} See Petitioners' Reply Comments, at 38-39.

The issue of whether ITFS licensees that take advantage of advanced technologies should be required to make greater use of their capacity before leasing is hardly new. Indeed, it was first addressed more than a decade ago in the context of the Comband analog compression technology developed by General Electric Corp. which allowed each ITFS channel to be employed for the simultaneous transmission of two video programs. In rejecting the suggestion that ITFS licensees who employed Comband technology should be required to double the amount of ITFS programming they transmit before engaging in leasing, the Mass Media Bureau ruled as follows:

The Comband system creates the potential for a significant increase in programming capacity with no increase in required bandwidth. We believe the maximum use and development of such capacity in an environment unburdened by regulation is to be encouraged. For this reason, licensees utilizing the Comband system will only be required to comply with the minimum service requirements for each assigned channel as a whole and will not be required to provide additional ITFS programming for each path created. Thus, as long as ITFS service is being provided on a channel for the minimum number of hours required by Section 74.931(e) of the Rules, the licensee using Comband has the discretion to offer other services concurrently with the ITFS programming. This will allow for the efficient utilization of available spectrum while assuring compliance with the ITFS use requirements of the rules. 231/

At this juncture, it would be counter-productive for the Commission to retreat from this approach. The record in this proceeding establishes beyond any doubt that ITFS licensees will realize significant benefits from the new technologies the Petition is designed to accommodate. At present, however, many ITFS licensees are finding it difficult to satisfy the existing ITFS minimum programming requirements. Adoption of increased programming requirements would create a disincentive for ITFS licenses to introduce the new technologies contemplated by the Petition, for it would increase the ITFS programming obligation that is already in place. Thus, to promote the

^{231/} General Electric Co., 61 R.R.2d 143, 147 (P&F 1986).

introduction of those technologies on ITFS stations, the Commission should retain its existing minimum ITFS programming rules subject to the revisions proposed in the Petition. 232/

c. The Commission Must Revise Its ITFS Channel Loading and Channel Mapping Rules To Accommodate The Investment Necessary To Introduce Two-Way Services For The Benefit of Consumers and Educators.

As the Petition explained, one of the most significant impediments to the introduction of advanced technologies is Section 74.931(e)(9) of the Commission's Rules, which provides in pertinent part that:

A licensee may shift its requisite ITFS programming onto fewer than its authorized number of channels, via channel mapping technology or channel loading, so that it can lease full-time channel capacity to a wireless cable operator, subject to the condition that it provide a total average of at least 20 hours per channel per week of ITFS programming on its authorized channels.^{233/}

While this rule grants ITFS licensees the flexibility to free some of their channels for full-time commercial use, it effectively mandates that at least one channel of every four channel group be used

^{232/} Of course, the existing minimum use requirements of Section 74.931 should be revised to permit non-video programming, such as high-speed Internet access, to be considered as satisfying the Commission's mandatory use requirements, and to reflect that such programming cannot readily be measured using the hours/channel construct of the current rule. The Petitioners agree with the NIA/WCA Joint Proposal that those licensees who do not transmit 20 hours per channel of video programming should be required to transmit and use an equivalent amount of non-video information. However, because of the current uncertainty as to how such usage can be measured, the Commission should refrain from adopting at this time any rules establishing specific non-video benchmarks and instead require bona fide good faith efforts on the part of ITFS licensees that engage in non-video transmissions to comply.

^{233/ 47} C.F.R. § 74.931(e)(9) (emphasis added).

for the transmission of educational programming. The Petition proposed to amend Section 74.931(e)(9) to permit an ITFS licensee, at its sole discretion, to satisfy its mandatory programming requirements using any channel in a wireless cable system of which it is a part, and the *NPRM* seeks comment on that proposal. 235/

Whatever the merit of the current rule when channels are being employed to transmit traditional analog video programming, it will be problematic for many wireless cable systems attempting to utilize microwave channels for advanced digital communications. As discussed in more detail above, system developers will attempt to utilize contiguous 6 MHz channels for two-way services in order to promote spectral efficiency. Depending upon the demand for two-way services generated by educators, wireless cable subscribers and the number of 6 MHz channels required to meet that demand, it may be that entire ITFS channel groups will have to be devoted for return paths. Thus, two-way services may only be practical in many cases if an ITFS licensee can

^{234/} The number of channels that an ITFS licensee can free for full time commercial use is the subject of presently pending petitions for reconsideration of the Commission's 1994 decision to consider only programming transmitted for "real time" viewing by students towards the ITFS minimum programming requirements.

 $[\]frac{235}{}$ See Petition, App. B, at 40-41; NPRM, at ¶¶ 70-77.

channels A1, B1, A2, B2, A3, B3, and A4 or G1, H1, G2, H2, G3, H3 and G4. In either case, an entire four channel group (the A group in the first example and the G group in the second) would be devoted for return paths. It is not surprising, then, that the *NPRM* acknowledges that "depending on the demand for two-way services, entire ITFS channel groups may need to be devoted for return paths." *See NPRM*, at ¶ 70. Note, however, that although an entire channel group may have to be "turned around" for return path use, the Petitioners are proposing that the licensee be required to secure at least one channel in another group that is configured for downstream transmissions through a channel swap.

provide its entire channel capacity for two-way services and satisfy its minimum ITFS programming obligations utilizing channels other than those for which it is licensed. 237/

As the *NPRM* properly concludes, "an almost necessary component of this scheme to devote significant blocks of the MDS and ITFS spectrum to return paths involves the continued allowance of channel loading." Indeed, as is recognized by the NIA/WCA Joint Proposal, channel loading must not only be continued, it must be expanded to permit the shifting of required programming onto other ITFS channels within the wireless cable system. Because Section 74.931(e)(9) mandates that each ITFS licensee satisfy the minimum programming requirement using at least one of its own channels, that section effectively precludes such a system configuration. The Petitioners are not suggesting that an ITFS licensee should be forced to shift its programming off of its channels. What

As is discussed in more detail below, even if the ITFS licensee swaps one of its channels for another elsewhere in the MDS/ITFS band in order to retain access to one channel capable of downstream video, circumstances may exist which prevent that channel from being used by the licensee for the transmission of its own programming. *See infra* at note 253 (addressing need for channel loading to accommodate use of "headend-in-the-sky" services).

 $[\]frac{238}{}$ *NPRM*, at ¶ 73.

^{239/} It should be noted that the Petitioners initially proposed that an ITFS licensee be permitted to shift its required programming onto any channel of the wireless cable system, without regard to whether it was an ITFS or MDS channel. *See* Petition, App. B, at 40-41. However, NIA strongly believed that all required ITFS programming should be transmitted on an ITFS channel and that requirement is part of the NIA/WCA Joint Proposal. Deferring to the intent of the NIA/WCA Joint Proposal that it be accepted or rejected *en toto*, the Petitioners do not object to adoption of a requirement that any required ITFS programming that is channel loaded be loaded onto an ITFS channel.

they are proposing is that each ITFS licensee be granted the flexibility, in its sole discretion, to shift all of its ITFS programming to other channels without jeopardizing its license. 240/

The Commission has recognized that "MMDS channels and ITFS channels are interrelated components of an integrated set of channels used to provide nonbroadcast instructional and entertainment programming in a given market" and that "it is most practicable to view [an ITFS] licensee's group of four ITFS channels as an integral constituent of a market-wide set of channels used to transmit instructional and educational programming." As a result, the Commission permits ITFS licensees to place their "ready recapture" time on any channel within the wireless cable system, regardless of whether that channel is licensed to the ITFS licensee in question. Simply stated, the Petitioners believe the Commission should extend that policy to the programming transmitted in satisfaction of the minimum programming requirements as a way of opening contiguous channels for two-way services. As the *NPRM* acknowledges, adoption of such a rule "would be the next step in a progression of rule changes that have afforded ITFS licensees increased

The Petitioners are pleased that the *NPRM* has proposed to adopt the proposed change to Section 74.931(e)(9) which makes clear that the use of channel loading would "not be considered adversely to the ITFS licensee in seeking a license renewal or otherwise." *See NPRM*, at ¶ 77. The record developed in response to the *Public Notice* made clear that the inclusion of this language is of critical importance not only to the Petitioners, but also to the DL&A ITFS Parties and the SW&M ITFS Parties. *See* Petition, at 40; DL&A ITFS Comments, at 6; SW&M ITFS Comments, at 5. And, this proposal is an essential element of the NIA/WCA Joint Proposal. While the Petitioners appreciate that the Commission considers establishment of a renewal expectancy to be beyond the scope of this proceeding (*see NPRM*, at ¶ 77), establishing that the use of channel loading will not be considered adversely at renewal time is clearly a matter ripe for consideration.

^{241/} ITFS Channel Loading, 9 FCC Rcd at 3364.

 $[\]frac{242}{}$ Id. at 3365.

flexibility in the implementation of their minimum programming requirements." So long as sufficient ITFS programming is transmitted on behalf of each ITFS licensee, there is absolutely no logical reason for requiring that programming to be transmitted on any particular channel of the integrated system. 244/

Consistent with the philosophy that ITFS licensees should be afforded the greatest amount of flexibility possible in the scheduling of their airtime without jeopardizing their educational and instructional objectives, and recognizing the need to conform to the digital reality, the Petitioners believe the Commission should revisit its 1994 ruling in the *Report and Order* in MM Docket No. 93-106 that each ITFS licensee engaged in channel mapping or channel loading preserve the ability to transmit all of its ready recapture time on the number of channels for which it holds a license simultaneously. 245/

As WCA has noted in its still-pending petition for reconsideration of that decision:

the fundamental problem with the Commission's approach is that it forces an ITFS licensee to sacrifice its ability to spread its ready recapture time as it sees fit. Because airtime on a wireless cable system is a scarce commodity, ITFS licensees and wireless cable system operators go to great lengths to schedule the 80 hours of ready recapture time available to a four channel licensee wisely. The requirement that all ready recapture time be scheduled for simultaneous access undercuts their ability to craft efficient schedules. For example, a local school district holding an ITFS license for four channels with no immediate need for Saturday airtime may to preserve substantial evening airtime for adult education programming, but also desire

 $[\]frac{243}{}$ *NPRM*, at ¶ 71.

²⁴⁴ Indeed, retention of the current rule would effectively preclude some or all of the ITFS licensees in a given market from combining all of their educational programming onto contiguous channels in order to enhance the ability the viewers to locate educational programming.

²⁴⁵/ See WCA Channel Loading Petition, at 12.

to preserve the right to recapture three morning hours on one channel on Saturday on the off chance it may have some future need. Under the Commission's new rule, that ITFS licensee could not do so. Rather, it would have to preserve simultaneous access to four channels on Saturday morning. Simply put, in order to preserve three hours, the school district would have to expend 12 of its 80 ready recapture hours, nine of which it would prefer to have available weekday evenings. 246/

With the development of digital technology, that problem will only become exacerbated. Under the NIA/WCA Joint Proposal, an ITFS licensee of four 6 MHz channels will have the ability to recapture at least 25% of the capacity of each channel, and will be able to shift that capacity to any ITFS channel in the system. The Petitioners believe that it would be counterproductive to require the ITFS licensee to maintain simultaneous access to 25% of each of four channels when the educator may conclude that its needs can best be served by preserving the right to recapture substantial time during heavy usage periods, and less time during times when there is less significant demand. For example, a school that employs some of its ITFS capacity for high speed Internet access may desire the ability to recapture some small portion of time on one just channel during the late evening and early morning hours (when demand will be light). Simply put, the Commission should defer to the local educator to determine the best method for scheduling the capacity available for recapture.

2. In Conjunction With Adoption Of The Other Elements Of The NIA/WCA Petition, The Commission Should Require That Each ITFS Licensee Remain Licensed For At Least One Downstream Channel.

As discussed in detail in Section II.E above, the Petitioners fully support adoption of proposed rules, first advocated by the SW&M ITFS Parties, that would promote the swapping of

 $[\]frac{246}{}$ See id. at 13-14.

channels among ITFS and MDS licensees. Indeed, such swapping will also help address another common concern expressed by educators in their comments in response to the *Public Notice* -- the difficulties that ITFS licensees may face upon termination of their relationship with the wireless cable operator if they have modified their facilities to take advantage of cellularization or have allowed all or part of their channels to be used for return paths.

If, as the Commission has already recognized, "MMDS Channels and ITFS channels are interrelated components of an integrated set of channels used to provide non-broadcast and instructional and entertainment programming in a given market," the interrelationship among licensees in a market will only increase with the deployment of advanced technologies. The Petitioners must reiterate that it is inevitable that MDS licensees and ITFS licensees in a market will all lose some degree of autonomy when their channels are combined into an advanced system, and may find it impossible to return to their pre-lease configuration upon termination of their lease. The Petitioners recognize that most licensees will want to provide for some level of continued operations should their relationship with the wireless cable operator end. However, since the post-relationship needs of each educator will be different, the Petitioners believe the Commission should

^{247/} ITFS Channel Loading, 9 FCC Rcd. at 3364.

^{248/} Even today, MDS and ITFS licensees often enter into arrangements that effectively preclude a return to the *status quo* upon termination of the relationship. For example, when all of the licensees in a market choose to co-locate at a single transmission site — a process the Commission encourages — they may find themselves precluded from returning to their former transmission sites because of the Commission's adjacent channel interference protection requirements. This is simply a price that all licensees must pay for the benefits they anticipate realizing during the term of the relationship, and the Commission has wisely refrained from attempting to regulate in this area.

generally refrain from regulating this element of the relationship and allow the parties to address post-relationship facility configuration issues by contract.

Since the proposed rules provide licensees with tremendous flexibility, any Commission mandate will undoubtably prove counter-productive for many licensees. Take, for example, an ITFS licensee that agrees to permit some of its licensed channels to be used for return paths as part of a cellularized wireless cable system, and uses its available capacity for a combination of upstream and downstream uses. Upon the termination of the lease, that licensee might want to use all of its available capacity for downstream communications from a single site. Or, it might want to employ a cellularized transmission system for that downstream capability. Or, the ITFS licensee might want to retain some response station capability. There is no "one size fits all" approach; rather, the best approach in any situation will depend upon the needs of the local educator.²⁴⁹ Thus, the

²⁴⁹/ The benefits of freedom of choice and freedom of contract can perhaps best be illustrated by responding to the NPRM's questions regarding the type of equipment that a lessee should be required to make available to an ITFS licensee at the conclusion of an excess capacity lease. The Commission inquires "should it only be digital equipment comparable to that in use of the system at the time the lease is terminated or should it be equipment that would make it possible for the ITFS licensee to restore analog video operation, if necessary?" NPRM, at ¶ 87. The short answer is, it should be whatever the ITFS licensee contracts for after making the best assessment of its post-lease needs. To suggest that there is one universally applicable answer is to ignore the material differences among ITFS licensees. Some ITFS licensees may not want to contract for any equipment at all. Assume, for example, an ITFS licensee that has an analog facility that can be "mothballed" upon replacement by a digital facility provided by the lessor. That licensee might well prefer to secure benefits other than analog transmission equipment from the lessor at the termination of the lease, since that licensee can retain its own analog equipment for post-lease use. Of course, if that licensee believed it would want to continue to transmit using digital technology, it might want to negotiate for access to the digital transmission equipment after the termination of the lease. Or, assume that the ITFS licensee had permitted some of its channels to be "turned around" for return path use. If the licensee believes it will want to retain two-way capabilities after termination of the lease, it might negotiate to retain its two-way facilities. If, on the other hand, the licensee determined that it would prefer to revert to downstream transmissions on all channels, it might negotiate for new downstream

Commission should generally leave it to each ITFS licensee to negotiate its own arrangements for post-relationship facilities. 250/

However, the Petitioners recognize that one exception to their preferred approach is appropriate. The *NPRM* seeks comment on a proposal advanced by the DL&A Parties that each ITFS licensee be required to preserve at least one 6 MHz channel capable of downstream video transmissions to receive sites so that the ITFS licensee can at a minimum always engage in such transmissions should the ITFS licensee for some reason leave the wireless cable system. Acknowledging that there may be a need for all channels in an ITFS channel group to be used for upstream transmissions, the DL&A ITFS Parties proposed that the Commission allow ITFS licensees to swap channels to assure that this preservation can be accomplished. For example, they proposed that if the A Group is to be used entirely for upstream transmissions, the A Group licensee could

equipment upon lease termination.

Similarly, CTN's suggestion that the Commission must mandate ITFS access to transmission equipment "in the event of commercial failure of the wireless cable system, e.g., through a first option to buy equipment for ITFS entities, or establishment of escrow accounts or performance bonds for a period of time" seeks to interject the Commission into matters best left to the parties to resolve. Wallace Letter, at Attachment VI.B.3. What, if any, equipment the ITFS licensee desires, and what, if any, mechanism for assuring the availability of that equipment in the case of commercial failure, is a matter best determined by the local ITFS licensee, not CTN or the Commission.

^{250/} The Petitioners note that the Commission's current rule barring ITFS licensees from entering into leases extending more than ten years has the effect of increasing uncertainty for the ITFS community. To the extent that educators are concerned that wireless cable operators will reconfigure the ITFS facilities in a market and then refuse to renew leases or employ that reconfiguration as leverage during renewal negotiations, an answer may be to permit ITFS licensees to enter into longer-term relationships with wireless cable operators as proposed by NIA and WCA.

trade one of its channels for a channel in a group that will continue to be used for downstream transmissions.

As the Petitioners have previously noted, the approach suggested by the DL&A ITFS Parties represents an innovative mechanism by which ITFS licensees can assure that their requirements are met even if they withdraw from a system. 251/While the Petitioners would have preferred that this approach be implemented contractually rather than by Commission fiat, 252/it is an essential component of the NIA/WCA Joint Proposal. Therefore, the Petitioners urge the Commission to permit inter-group channel swaps and mandate that no licensee be permitted to employ all of its licensed channels for return paths. In this manner, the Commission can accommodate the need for a contiguous block of channels for return paths, while assuring that if that block encompasses an entire channel group, the current licensee will continue to have some downstream capability after termination of its relationship with the wireless cable operator. 2531/

^{251/} See Petitioners' Reply Comments, at 31-32.

 $[\]frac{252}{}$ See id.

^{253/} It should be noted that although in some cases adoption of the DL&A Parties' proposal may somewhat reduce the need for channel loading of required programming, it will not entirely eliminate the need for the Commission to permit ITFS licensees to transmit their required programming on channels licensed to others. Because of the substantial costs that would be incurred if each wireless cable system were required to acquire equipment to compress 100+ channels at every headend, most wireless cable operators are exploring the use of so-called "headend-in-the-sky" services. These services, simply put, will distribute via satellite pre-bundled packages of compressed programming that a wireless cable system can retransmit to its subscribers without additional processing at the head-end. For example, the satellite service may bundle Cable News Network, CNN Headline News, The Discovery Channel, The History Channel, The Learning Channel and Animal Planet into a single compressed program feed that would then be retransmitted over a single 6 MHz channel by the wireless cable operator for de-compression and viewing at the subscriber location. Although each ITFS licensee will have at least one channel of downstream capacity under

3. The Commission Should Not Impose Restrictions On ITFS Lease Provisions That Both Deter Investment In Wireless Cable And The Wireless Cable Industry's Continued Support For ITFS.

The *NPRM* also asks "whether our present requirements for excess capacity leases, including those dealing with control issues, length of lease, and rights on termination, should apply." As noted earlier, the Petitioners believe that although well-intentioned, the Commission's policies on ITFS leases have inadvertently deprived ITFS licensees and their wireless cable partners of the ability to craft relationships that meet the needs of the educator, or allow wireless cable operators to prosper in a manner that benefits both the wireless cable industry, ITFS licensees and consumers.

a. The Commission Should Permit ITFS Leases To Extend To Fifteen Years.

Particularly as wireless cable operators are contemplating the deployment of expensive advanced technologies, the answer to whether the present restrictions on the length of ITFS excess capacity lease agreements should continue to apply is simple – the Commission's ten year limit on

the NIA/WCA Joint Proposal, if a wireless cable operator employs that capacity to redistribute a "headend-in-the-sky" service, it cannot be used for the retransmission of local educational programming without substantial additional expense. Rather, wireless cable operators are likely to set aside a group of channels for local or regional programming that is not available from a "headend-in-the-sky" service, including local entertainment, sports and ITFS programming. In order to reduce costs, all of the programming which must be compressed locally will combined into one or more 6 MHz channels. For example, if the A, B, C, D and E Groups are being used for the distribution of digital video programming, the operator may choose to use the lower portion of that band for all locally-compressed ITFS, sports entertainment programming, and broadcast signals, with the upper portion of the band being used for pre-compressed programming received from a satellite service.

leases must be revisited.^{255/} Whatever the merit of the restriction when wireless cable operators were constructing relatively simple analog video distribution systems, the ten-year limit on excess capacity leases has become an obsolete impediment to the deployment of capital-intensive advanced digital video, voice and data service offerings. The Petitioners are not suggesting that the Commission allow ITFS licensees *carte blanche* in setting the maximum term of excess capacity leases, but do propose that the Commission adopt the provision of the NIA/WCA Joint Proposal under which ITFS licensees be authorized to enter into fifteen-year lease agreements, subject to renewal of the underlying ITFS license.

When it last considered the issue, the Commission found that:

We are mindful that the wireless cable industry requires substantial equity investment in order to become a viable competitor in the video marketplace. We also realize that a potential financier is likely to exercise caution before investing in an MDS system, where there is uncertain long-term availability of the ITFS channels that provide the basic capacity for that system. . . . The increased confidence of investors will significantly accelerate the development of the wireless cable industry and provide competition to wired cable. 256/

Since then, there has been a dramatic change in the cost structure for wireless cable. Although the cost of deploying advanced technologies will vary depending upon the services to be offered and the nature of the market, it is anticipated that the conversion to digital service offerings will at least double the cost per subscriber, and could triple or quadruple the cost in comparison to the cost of serving an analog subscriber. Obviously, with cost increases of this magnitude, the investment community will require far greater comfort regarding the availability of ITFS channels

 $[\]frac{255}{}$ *Id.* at ¶ 87.

^{256/} ITFS Filing Window Order, 10 FCC Rcd at 2914.

before funding the deployment of advanced technologies. This is particular true given that wireless cable will be competing against wireless communications services where the risks of losing access to spectrum capacity over time are minimal because the channels are licensed directly to the system operator and come with a substantial renewal expectancy.²⁵⁷ By affording ITFS licensees the flexibility to enter into leases of up to fifteen years, subject to license renewal, the Commission will place wireless cable on a more equal footing with its brethren in the eyes of potential investors.

In the past, the Commission has explained its reluctance to permit increases in the length of ITFS leases on the grounds that "a ten-year term . . . permits the ITFS licensee to adjust to changing educational needs, particularly in the absence of the right to readily adjust its use of airtime beyond specific narrow limits within the license term." In considering the Petitioners' proposal, the Commission should keep in mind that adoption of the NIA/WCA Joint Proposal would afford ITFS licensees a substantial increase in the effective capacity available to the ITFS licensee. For example, an ITFS licensee that chooses to transmit digitally compressed programming will, as a practical matter, retain the ability to transmit more than four programs simultaneously at all times — an increase in the effective transmission capability it would have had if it had not entered into an ITFS

^{257/} For example, For example, WCS and LMDS licensees have been afforded a renewal expectancy upon expiration of their ten-year license term. See 47 C.F.R. §§ 27.14 (WCS renewal expectancy) and 101.1011 (LMDS renewal expectancy). See also 39 GHz Order, at ¶ 49 (adopting renewal expectancy for 39 GHz licensees following expiration of license term). In addition, cable operators generally hold fifteen year franchises, which are usually renewed as a matter of course.

^{258/} PR Docket 90-54 Report and Order, 5 FCC Rcd at 6416.

excess capacity lease in the first place. 259/ Under these circumstances, each ITFS licensee will have sufficient flexibility to adjust to changing needs such that an increase in the lease term should not prove problemmatic.

b. The Commission Should Reconsider Policies That Deny Wireless Cable Operators Reasonable Assurance That The Channels They Have Leased Will Be Available Throughout The Lease Term.

For somewhat similar reasons, the Commission also should repeal current policies that have the effect of denying wireless cable operators reasonable assurance that the channels they have leased will be available throughout the lease term. Specifically, the Commission should reconsider and reverse two related policy decisions that have been adopted in the context of individual applications without the benefit of broader consideration in rulemaking proceedings -- (1) the policy of barring lease provisions that require the ITFS licensee to assign the remaining obligations under an excess capacity lease if it chooses to assign the underlying ITFS license; ²⁶⁰ and (2) the policy of rejecting lease provisions which require an ITFS licensee that desires to cease operating its facility during the term of an excess capacity lease to provide the wireless cable operator a reasonable

²⁵⁹ Given the costs associated with the deployment of advanced digital technologies, it is fair to assume that only a handful, if any, ITFS licensees would fund a conversion from analog technology without the financial support of a wireless cable operator.

²⁶⁰ See Applications of Central Cass Public School District and Independent School District 146, 10 FCC Rcd 3167 (1995) (rejecting provision of lease that "requires any propective assignee or purchaser of the ITFS station to assume and agree to be bound by all of the terms and conditions of the lease agreement, as if the purchaser were the original lessor.")

opportunity to secure an ITFS eligible that would accept an assignment of the license before it is returned to the Commission for cancellation. 261/

The provisions that have been rejected were intended to play an important role — they provided the wireless cable operator with assurance that the leased channel capacity will be available throughout the term of the lease. Absent such provisions, the ITFS licensee could arguably accept a variety of upfront payments and other consideration from the wireless cable operator, and then either assign its license to a third party or return its license to the Commission for cancellation without ever providing transmission capacity to the wireless cable operator in return. Although this may be an extreme example, it illustrates how the current policy allows any ITFS licensee to deprive the wireless cable operator of its anticipated future benefits in an manner that is fundamentally unfair. While these policies are no doubt intended to "protect" the ITFS licensee (although it its difficult to see how any ITFS licensee would be harmed by entering into an agreement containing these provisions), they have the unintended consequence of deterring wireless cable operators from providing the contractual benefit that most ITFS licensees desire most — upfront financial and equipment considerations that will allow the ITFS licensee to bear the start-up costs it will encounter in developing an ITFS-based educational program.

Not surprisingly, these policies have proven to be a significant deterrent to the provision of upfront financial payments, equipment and other benefits to ITFS licensees – an operator is loathe

²⁶¹ See, e.g., Applications of Harlem Consolidated School District #122 and Belvidere Community Unit School District #100, 9 FCC Rcd 7927 (1994); Applications of Sweeny Independent School District, Columbia-Brazoria Independent School District, and Texas State Technical College, 8 FCC Rcd 3207 (1993).

to provide benefits other than monthly payments if the ITFS licensee is free to accept upfront benefits but then avoid its obligation to provide excess capacity by assigning or returning the license. The Commission has never explained why a licensee that chooses to accept the benefits of an excess capacity lease should be permitted to avoid the obligations under the lease. The Commission does not let wireless cable operators avoid their legal obligations under leases; why should it allow ITFS licensees?

Moreover, the Commission's policy has undoubtably played a role in deterring investment in the wireless cable industry. As noted above, the investment community has been reluctant to fund wireless cable operators in part because so much of the channel capacity can only be secured for a ten year term. The Commission's policies permitting license assignments without assignment of the underlying lease and permitting the return of licenses has magnified the problem — there is no longer any certainty even that ITFS channels which are leased for ten years will actually be available for the entire ten year term. As such, the Commission's policies are hardly conducive to the massive investment that will be required to fund the future growth of wireless cable (with its attendant benefits for ITFS licensees) and the inauguration of advanced digital services. By allowing any ITFS licensee to renege on its contractual obligation to provide channel capacity for a ten year period, the Commission's policy is having the unintended consequence of denying to those ITFS licensees who are prepared to honor their contractual obligations the significant benefits that a relationship with a well-funded wireless cable operator can bring.

4. The Commission Should Not Require ITFS Licensees To Retain Independent Counsel And Consulting Engineers.

The Petitioners agree with the Commission's decision to reject ITF's proposal²⁶² that the Commission require all two-way digital applications and interference consents to be reviewed by legal and engineering counsel who are independent, and to have such professionals certify that the submission will not be harmful to "future instructional service." The Commission has previously rejected a requirement that ITFS licensees hire separate legal counsel, and there is no compelling reason to reverse course. ²⁶⁴

As the Petitioners have previously noted, not only is this proposal largely unworkable — it is difficult to imagine that any lawyer or engineer would consider themselves qualified to predict the impact of an application or a consent on "future instructional service" — it is inappropriate. The Commission restricts eligibility to hold an ITFS licensee to those who either possess bona fide educational credentials or who have affiliated with educators. It is those educators, not lawyers or consulting engineers, who are best positioned to determine the educational needs of their community. While ITF's concern that a few ITFS licensees may lack the skills to fully evaluate system design proposals may be valid, the solution is for ITF and other experienced ITFS licensees to educate those brethren as to the need to retain competent consultants, not for the Commission to

^{262/} See ITF Comments, at 17.

 $[\]frac{263}{}$ See NPRM, at ¶ 86.

²⁶⁴ MM Docket No. 83-523 Second Report and Order, 101 F.C.C.2d at 91.

²⁶⁵/ See Letter from Paul J. Sinderbrand, Counsel to Petitioners, to William F. Caton, RM-9060, at 5 (filed June 11, 1997).

add another layer of regulation to the already highly-regulated wireless cable/ITFS relationship. As ITFS licensee Charlotte-Mecklenburg Public Broadcasting Authority ("CMPBA") put it, "the Commission should be wary of being unnecessarily 'paternalistic' when it comes to protecting the ITFS community." 266/

5. The Commission Should Not Require The Amendment Of Leases That Already Contemplate The Introduction Of Digital Technology.

A critical component of the NIA/WCA Joint Proposal is the provision which grandfathers all excess capacity lease agreements entered into prior to the date of an order adopting new rules in this proceeding. As contemplated by NIA and WCA, to the extent that an excess capacity lease agreement already provides for digitization or the inauguration of advanced technology services, that lease should continue to govern the relationship between the wireless cable operator and the ITFS licensee for its duration. While most excess capacity leases do not contemplate such technological advances as return paths and will have to be amended before ITFS channels are converted for return path use, some agreements may have contemplated return paths, and many of the agreements in existence today provide mechanisms for the introduction of digitization, antenna sectorization and/or cellularization. As the parties have already fixed the appropriate consideration due each party as a result of their respective costs and benefits from a conversion to advanced technologies, there is no reason for the Commission to require amendments to all existing agreements. Indeed, in many cases some of that consideration has already been paid -- for example, it is not unusual for the wireless cable operator to make a significant upfront payment to the ITFS lessor in order to assist the ITFS

²⁶⁶ Letter to William Caton from Harold A. Bouton, President and General Manager of CMPBA, RM-9060 at 2 (filed May 29, 1997).

licensee in meeting the one-time start-up costs it will face in order to make the most productive use of the ITFS capacity from the commencement of service. Were the Commission to require the renegotiation of lease agreements, fundamental fairness dictates that the Commission must also provide for a return of upfront consideration paid in exchange for anticipated future benefits. The Petitioners believe, as a practical matter, that it would be impossible for the Commission to do so. Therefore, the Petitioners strongly recommend that the Commission implement the NIA/WCA Joint Proposal's call for a grandfathering of existing lease agreements. The parties, and not the Commission, are best positioned to determine whether proposed system changes require contract revisions. Since no ITFS facility can be modified without the execution by the licensee of an appropriate application form, every ITFS licensee will have an opportunity to consider its contractual rights and obligations before technical changes are implemented, and can insist upon an amendment if necessary.

III. CONCLUSION.

Commissioner Ness had it right when she summarized the Commission's goals in managing the spectrum: "We need to be fair, flexible, and fast." The Commission is to be applauded for its prompt action in releasing the NPRM soliciting comment on the proposals advanced in the Petition.

Adoption of the proposed rule changes suggested in the NPRM, subject to the revisions set forth above, will provide MDS and ITFS licensees the flexibility that they need in order to meet the

²⁶⁷ Hon. Susan Ness, "The End of the Beginning (or "Hoopla")," Special Commissioner's Forum, Wireless'96 Convention (March 25, 1996).

emerging communications needs of the commercial and educational marketplaces in a manner that is fair, flexible and fast.

Respectfully submitted,

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